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* **IN THE HIGH COURT OF DELHI AT NEW DELHI**

Reserved on:-16th April, 2024

Date of decision: 30th August, 2024

\+ **C.A. (COMM.IPD-PAT) 229/2022**

BLACKBERRY LIMITED ..... Appellant

Through: Mr. Pravin Anand & Ms. Aastha Koolwal, Advs. (M: 956466428)

versus

ASSISTANT CONTROLLER OF PATENTS AND DESIGNS ..... Respondent

Through: Mr. Arjun Mahajan, SPC for UoI, Ms. Neha Rai & Mr. Apoorv Upmanyu, Advs. (M: 9899215738).
Ms. Swati Pandey, Assistant Controller of Patents and Designs (through VC)

CORAM:
JUSTICE PRATHIBA M. SINGH

JUDGMENT

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Prathiba M. Singh, J.

1. This hearing has been done through hybrid mode.

A. Background

2. The present appeal under Section 117A of the Patents Act, 1970 (*hereinafter 'the Act'*) was originally filed by the Appellant- BlackBerry Limited before the Intellectual Property Appellate Board (*hereinafter, 'IPAB'*) in the year 2020. Vide order dated 6th March, 2020, notice was issued by the IPAB in the present appeal. Thereafter, consequent upon the abolition of the IPAB and, upon the enactment of the Tribunals Reforms Act, 2021, the present appeal stood transferred to this Court.

3. The Appellant is a corporation organised under the laws of Ontario, Canada, specializing in providing telecommunication products, services, and solutions. These include enterprise software, Internet of Things (IoT), network infrastructure, and other associated services. The Appellant was originally known as Research In Motion (RIM) and is widely known as the former developer of the BlackBerry brand of smartphones and tablets as also the messaging app BlackBerry Messenger, commonly referred to as *'BBM'*. The Appellant claims that its products are used worldwide by various businesses, automobile makers, and government agencies.

4. The present appeal relates to the subject patent application titled "*Administration of Wireless Systems*". The subject patent application bearing Application Number 1762/DEL/2008 was filed on 25th July, 2008, with ten (10) Claims, as a Convention Application, claiming priority from three US patent applications. The earliest priority date of the subject patent application

is 27th July, 2007. Thereafter, the subject patent application published as per Section 11 of the Act on 6th March, 2009. The Bibliographic details of the subject patent application are set out below:

Application Number	1762/DEL/2008
Application Type	Conventional Application
Date Of Filing	25/07/2008
Applicant Name	**Blackberry Limited**
Title of Invention	Administration Of Wireless Systems
Field of Invention	Communication
E-Mail	anandandanand@vsnl.com
Priority Date	27/07/2007
Request For Examination Date	26/06/2009
Publication Date (U/S 11a)	06/03/2009
Reply To Fer Date	26/04/2016

5. The Appellant filed a Request for Examination for the subject patent application on 19th November, 2008. In response to the same, initially, the Indian Patent Office (*'IPO'*) issued a First Examination Report ('*FER'*) dated 28th December, 2015 raising objections of redundancy of Claims, lack of inventive step, as also an objection under Section 3(k) of the Act. Other objections regarding lack of clarity, and non-compliance with formal requirements were also raised by the IPO in the said FER. To substantiate the objection of lack of inventive step, the ld. Assistant Controller of Patents and Designs (*hereinafter 'Controller'*) cited give prior art documents. A tabular chart capturing the details of the five prior art documents cited by the Controller is set out below:

Prior Art	Reference	Title
D1	US2006277408	System and method for monitoring and maintaining a wireless device
D2	US6615038	Method and apparatus for triggering actions at a host computer based on predictive analysis
D3	US2007006289	Enforcing device settings for mobile devices
D4	WO0244958	Method and system for event and location-based content delivery system
D5	US2004225525	Automatic contacts replication system and software

6. In response to the FER, the Appellant filed their reply dated 26th April, 2016, requesting the ld. Controller to reconsider the objection regarding redundancy of Claims as also waive the objections of lack of inventive step and subject matter eligibility under Section 3(k) of the Act. In the said reply to the FER, the Appellant claimed that none of the five prior arts individually or collectively, taught or even suggested the features claimed in the subject patent application. Further, the Appellant asserted that the objection under Section 3(k) of the Act ought to be waived on account of the reasoning that the subject patent application is implemented by hardware units such as servers, wireless devices, and server interfaces, which are necessary for the implementation taught by the present invention.

7. In response to the reply to the FER submitted by the Appellant, the ld. Controller issued a hearing notice dated 16th July, 2019 reiterating some of the objections of lack of clarity, redundancy of Claims and subject matter eligibility under Section 3(k) of the Act. Additionally, some formal objections were also cited by the ld. Controller. However, the objection of lack of

inventive step was however dropped by the ld. Controller taking into consideration the explanation given by the Appellant, which distinguished the prior arts cited by the IPO.

8. The Appellant attended the hearing scheduled by the ld. Controller on 6th September, 2019 and subsequently filed written submissions to substantiate its arguments seeking grant of the subject patent application. In the written submissions filed before the IPO, the Appellant revised the Claims of the subject patent application and limited them to six (6) Claims. Further, to overcome the objection of redundancy of Claims, the Appellant Claims 1-3 of the originally filed Claims were cancelled. In respect of the pending objection under Section 3(k) of the Act, the Appellant asserted that the Claims of the subject patent had a technical effect and were technically enabled which contribute to their technical character. Accordingly, the Appellant contended that the objection under Section 3(k) of the Act was not tenable. In addition, the Appellant also attempted to overcome all the formal objections raised by the ld. Controller in the hearing notice.

9. However, despite the submissions advanced by the Appellant, the ld. Controller refused the application for the grant of the patent under Section 15 of the Act on the grounds that the objection relating to non-patentability under Section 3(k) of the Act still persisted. The impugned order dated 25th September, 2019 was passed by Ms. Swati Pandey, Assistant Controller of Patents and Designs on the grounds that the subject application was directed towards sets of instructions and software which were purely functional and lacking any inventive hardware features. Aggrieved by the impugned order, the Appellant has filed the present appeal.

B. Submissions

B1. Submissions of the Appellant

10. On behalf of the Appellant, submissions have been advanced by Mr. Pravin Anand, ld. Counsel. He has primarily canvassed his submission on the basis of a Synopsis of Appeal dated 9th September, 2022 and a Brief Note of submissions dated 27th March, 2023. The Appellant has also filed a chart giving the status of applications derived from the same priority and/or part of the same patent family. The said chart also includes the status of Indian Patent Applications deriving priority from the same application and/or part of the same patent family.

11. It is the case of the Appellant that the subject patent application relates to administering wireless systems by configuring wireless client devices using both primary and secondary wireless servers. According to the Appellant, the servers maintain policies that determine the device's operation modes and other parameters. Conflicts arise when policies from different servers are inconsistent, such as one allowing information sharing while the other disallows it. It is asserted by the Appellant that these conflicts between different servers hamper device operation, which is the technical problem being addressed by the subject patent application.

12. As per Appellant, the Claims of the subject patent application address the technical problem identified by providing a technical solution to resolve conflicts between multiple wireless servers, ensuring proper operation of the device. The said technical solution involves evaluating and prioritizing policies from a primary and at least one secondary server. Mr. Anand, ld. Counsel has referred to paragraphs [0123] and [0124] of the Complete Specification to give some illustrative examples of the actual implementation

of the subject patent application. According to ld. Counsel, the subject patent in effect relates to how priorities is to be given to a particular server and how to resolve conflicts between instructions in two different servers.

13. According to the Appellant, this process determines if the secondary server's configuration data can override the configuration of the primary server, when unresolvable conflicts are identified, thereby ensuring that one server's configuration takes precedence. This resolution enables the mobile wireless client to function in the desired mode, ensuring that the device operates efficiently and effectively under the configuration dictated by the prioritized server.

14. Further in the Synopsis of the Appeal, the Appellant contends that the ld. Controller has not substantiated the objection in respect of non-patentability under Section 3(k) of the Act and merely given a conclusion by referring to certain paragraph numbers of the Complete Specification, containing certain specific words, without considering the context in which those words/ terminology is used. According to the Appellant, such selective reliance on certain words or terminology used in the Complete Specification, devoid of any assessment of the merits or substance of the invention cannot constitute a reasoned order. The Appellant also argues that the ld. Controller has been unable to justify how the subject patent application **'as a whole'** can be held to be a computer programme and attract the objection under Section 3(k) of the Act. Therefore, the Appellant requests that the impugned order refusing the grant of the patent be set aside, on the ground that impugned order is unreasoned and a non-speaking order. Reliance is placed on the judgment of the Coordinate Bench of this Court in ***Dolby International AB vs The Assistant Controller of Patents and Designs, 2023:DHC:1854***, to support

this prayer.

15. Contesting the objection under Section 3(k) of the Act on merits, the Appellant contends that subject patent provides mobile wireless clients the ability to first identify unresolvable conflicts between multiple servers, as also resolve the identified conflicts in favour of one wireless server to ensure the operation of the mobile wireless client in case of conflict. According to the Appellant, this capability demonstrates a technical effect and practical application, thereby not liable to attract the objection under Section 3(k) of the Act. Mr. Anand, ld. Counsel has made specific reference to the brief note of submissions filed on 27th March, 2023 to highlight the technical solution and the technical effect in the applied invention. The same reads as under:

> *"b. Technical solution: The invention encompasses identifying that conflicting configuration may arise when configuring the wireless client device from two sources, and provides a solution to the potential unrealized problem to resolve conflicting configuration data. Claims [Pages 222-224 of the appeal] disclose detecting the presence of the primary configuration data (supported by the primary server) and determining if secondary configuration data (from the secondary server) can be used to configure the client, by evaluating policies associated with each of the primary and secondary configuration data to* ***identify conflicts between the policies and resolving identified conflicts in favour of the primary configuration data****. Thus, the present invention provides the ability to: a) identify unresolvable conflicts between multiple servers, and b) resolve identified conflicts in favour of one wireless server over others so as to ensure operation of the client in the desired mode in any conflicting scenario.*
>
> *c. Technical effect: Facilitating configuration of permissible operation in a wireless mobile client device when dealing with conflicting configuration received*

from multiple servers."

16. The Appellant also challenges the finding of the ld. Controller that "*the wireless servers are merely a set of instructions (See para [0049], the group of software that may be installed on machine (see para 0054)."* and argues that the said finding is misleading. According to the Appellant, the Complete Specification clarifies that wireless servers can be realized in various configurations, including hardware and does not reduce the technical system using the software to merely an "*algorithm*" or "*computer program per se*". It is argued that even if the server is considered as software, it contributes to the technical character of the invention, which is not solely seeking protection for software or algorithms. The Appellant emphasizes that the presence of a computer program would not take away the technical effect produced by the present invention as a whole. Reliance is placed on the judgment of this Court in ***Ferid Allani v. Union of India, 2019 SCC OnLine Del 11867*** and the judgment of the UK Court of Appeals in ***HTC Europe Co. Ltd. V. Apple Inc., [2013] EWCA Civ 451*** in support of this contention.

17. The Appellant also contends that Section 3(k) of the Act, prohibits the patentability of only those inventions which are abstract in nature. Given that the subject patent includes hardware features and practical implementations, it cannot be considered abstract or be categorised as a computer programme *per se*. In respect of the contention of the Respondent that subject patent is nothing but an algorithm-based invention, Mr. Anand, ld. Counsel has relied upon the decision dated 15th July, 1986, of the Board of Appeal of the European Patent Office in ***T 208/94*** concerning ***Vicom Systems Inc***. According to Mr. Anand, ld. Counsel for the Appellant, the said decision clarifies the distinction between what constitutes a technical process and what

is a mere mathematical process/algorithm. Paragraphs 5 and 6 of the said decision are relied upon to argue that in the case of a mathematical method, the result is merely a numerical result whereas in a technical process, the algorithm or the software is used to implement and provide a change in the entity where it is installed. Such technical means could include a computer comprising customized hardware or even a general-purpose computer which is programmed for the said purpose. It is his submission that whenever the result is not a mere number but has a technical process behind it, the software would not be a software per se but would be rendered as a patentable invention.

18. In conclusion, Mr. Anand, ld. Counsel, submits that the present appeal is liable to be allowed on account of the perceivable technical effect of the subject patent, coupled with the application of the incorrect standard of lack of inventive hardware features applied by the ld. Controller. It is also highlighted by ld. Counsel that as recorded in order dated 18th August, 2023, Ms. Swati Pandey, ld. Assistant Controller of Patents has appeared before the Court and submitted that insofar as novelty and inventive step is concerned, the subject patent had satisfied the said requirements. It is also pointed out by Mr. Anand that the corresponding application for the subject patent application has been granted by the USPTO, EPO and the CNIPA.

B2. Submissions of the Respondent

19. Written Submissions dated 10th April, 2023 have been filed on behalf of the Respondent and Ms. Swati Pandey, ld. Assistant Controller of Patents has appeared before the Court through video conferencing. On 18th August, 2023, ld. Controller has admitted that the subject patent application has been refused only on account of objection on non-patentable subject matter under

Section 3(k) of the Act and no other objections are pending. Ms. Neha Rai, ld. Counsel has appeared on behalf of Mr. Arjun Mahajan, ld. Senior Panel Counsel and submitted that the subject patent is nothing but an algorithm-based invention. Reliance has been placed on paragraphs [0075] and [0076] of the Complete Specification of the subject patent to reinforce this submission.

20. As per the written submissions dated 10th April, 2023, with the view of countering the argument of the Appellant that the impugned order in unreasoned on account of selective reliance of few words, the Respondent claims that no explanation has been provided by the Appellant to validate such an objection. Further, in the said submissions, the Respondent has claimed that the present appeal is "*nothing but an abuse of process of law*" and that there are no sustainable grounds in law or fact in support of the appeal.

C. Analysis and Findings

C1. Prologue

21. Jurisdictions around the world are grappling with the question on how to treat computer-implemented methods, software related processes, and their integration with hardware under patent law. In the present appeal also, this Court has inherited complex questions surrounding the scope of patentability, the application of appropriate guidelines, and the doctrine of substance over form. In several cases before this Court and in the present appeal also, the contention that the subject patent is nothing more than an algorithm or sequence of instructions, is taken. This Court emphasizes that such a ground for challenging or refusing a patent application cannot be taken mechanically, without proper justification.

C2. Claim Construction

22. Claim Construction is an indispensable step in litigation involving patents. In ***Guala Closures SPA v. AGI Greenpac Limited, 2024:DHC:3715***, this Court, while referring to *Chapter 9: Construction of the Specification and Claims*', in ***Terrell on the Law of Patents***, Eighteenth Edition, highlighted that determining the scope of the Claims, is one of the most significant issues, in litigation involving patents. While the judgment in ***Guala Closures SPA (supra)*** primarily considered the issue of infringement, the said principle is also equally applicable when deciding appeals against the refusal of patent applications. In the context of the present appeal, where the Court must assess the nature, scope, and substance of the invention, Claim Construction becomes essential for determining the eligibility of the subject matter for which protection is sought.

23. A perusal of the Complete Specification of the subject patent application would reveal that it deals with a more efficient manner of ensuring flow of information between wireless systems including wireless servers which are connected to various handheld devices. Overall, the specification presents a framework for administration of wireless systems, focusing on secure data management, conflict resolution, and efficient synchronization between multiple servers and mobile devices. The key elements of the subject patent application, as per the Complete Specification are as follows:

- Architecture and Communication: The specification outlines an architecture where mobile wireless devices interact with wireless servers to access and control applications remotely. This setup includes methods for secure communication and synchronization between devices and servers.

- Data Management and Privacy: The specification incorporates methods for managing and storing user data, emphasizing privacy and security in data sharing and synchronization.
- Resolution of Conflicts between Server Configurations: For the said purpose, the specification highlights that the primary and secondary wireless servers are equipped with databases and programs to manage and disseminate configuration data. Further a program on the mobile device evaluates and resolves conflicts between the primary and secondary configuration data to ensure seamless operation.
- Agent and Synchronization Features: The specification describes various agents such as sync agents, browse agents, and policy agents, which facilitate the management of data and policies between the servers and mobile devices. These agents help automate processes like data synchronization, browsing server contents, and determining the primary server based on device location and other criteria.

24. In this background of the Complete Specification, this Court shall now proceed to identify the specific scope of protection sought through the subject patent application. The subject patent application comprises two (2) Independent Claims, one of which seeks protection over a system and the other over a method. The said two Independent Claims are set out below for ready reference:

> *"1. A system for administration of wireless systems, comprising:*
> *a primary wireless server (1002) communicatively operable with a plurality of mobile wireless clients (1004), the primary wireless server (1002) including: primary configuration data associated with at least one of the plurality of mobile wireless clients (1004)*

supported by the primary wireless server (1002);
a primary database operable on the primary wireless server (1002) and configured to store information associated with users of the mobile wireless clients (1004) including a user identification for each mobile wireless client (1004); and a primary program configured to control dissemination of information from the primary database to one or more of the plurality of mobile wireless clients (1004);
at least one secondary wireless server (1010) communicatively operable with at least one of the plurality of mobile wireless clients (1004), the secondary wireless server (1010) including:
a secondary database operable on the least one secondary wireless server (1010) and configured to store information associated with users of at least one of the mobile wireless clients (1004) including a user identification for the at least one mobile wireless client (1004); and
a secondary program configured to control dissemination of information from the least one secondary database to the at least one of the plurality of mobile wireless clients (1004);
at least one program executable on the at least one of the plurality of mobile devices (1004) to detect the presence of the primary configuration data and determine if secondary configuration data associated with the secondary wireless server (1010) can be used to configure the at least one of the plurality of the mobile wireless clients (1004), the determining including an evaluation of policies associated with each of the primary and secondary configuration data to identify logically unresolvable conflicts between the policies and resolve identified conflicts in favor of the primary configuration data; and
wherein the primary and secondary configuration data at least in part governs the permissible modes of operation for the at least one of the plurality of mobile

devices (1004).

xxx xxx xxx

3. A method for administration of wireless systems, comprising:
controlling operation of a primary wireless server (1002) to communicate with a plurality of mobile wireless clients (1004);
managing information in a primary database of the primary wireless server (1002) including storing information associated with users of the mobile wireless clients (1004), the information associated with the users including a user identification for each mobile wireless client (1004); and
controlling operation of the plurality of mobile wireless clients (1004) at least in part with reference to primary configuration data associated with the primary wireless server (1002);
controlling operation of a secondary wireless server (1010) to communicate with at least one of the plurality of mobile wireless clients (1004) communicated with by the primary wireless server (1002);
managing information in a secondary database of the secondary wireless server (1010) including storing information associated with the at least one of the mobile wireless clients (1004), the information associated with the at least one of the mobile wireless clients (1004) including a user identification;
determining, on the at least one of the plurality of mobile wireless clients (1004), whether the at least one of the plurality of mobile wireless clients (1004) configured with primary configuration data can be configured with secondary configuration data associated with the secondary wireless server (1010), the determining including an evaluation of policies associated with each of the primary and secondary configuration data to identify logically unresolvable conflicts between the policies and resolve identified conflicts in favor of the primary configuration data; and

wherein the primary and secondary configuration data at least in part governs the permissible modes of operation for the at least one of the plurality of mobile wireless clients (1004).

25. From a reading of the above Independent Claims, it is clear that both the system and method Claims describe the same overall concept of administering wireless systems using primary and secondary wireless servers to manage and configure mobile wireless clients. The system Claims provide a description of the various components of the subject patent and their configuration, providing the foundation for the method claim. Accordingly, the method Claim describes how to utilize the components so described in the system Claim to achieve the intended functionality, focusing on the dynamic processes involved. The system and method Claims together cover both the setup and operational workflow required to manage and resolve configuration data conflicts in wireless systems within devices. This approach ensures that the subject patent claims protection for both structural and functional features.

26. With this clarity on the extent and coverage of the scope of the Claims, this Court shall proceed to identify the specific details of the subject patent, by taking into consideration the extent of coverage of the Independent Claims and also the Dependant Claims. In the present Appeal, the Independent Claims of the subject patent specify the fundamental aspects of the invention that the Appellant seeks to protect, focusing on the primary elements and functionalities that constitute the core of the system and method for which protection is sought. Further, the Dependent Claims highlight the subsidiary features and enhancements that build upon the Independent Claims, providing a detailed understanding of the operational intricacies of the subject patent. The Dependant Claims of the subject patent are set out below:

"2. The system as claimed in claim 1, wherein the configuration data specifies one or more policies governing the use of the at least one mobile wireless client (1004).

xxx xxx xxx

4. The method as claimed in claim 3 comprising: controlling operation of the at least one of the plurality of mobile wireless clients (1004) using at least some primary configuration data associated with the primary wireless server (1002) and at least some secondary configuration data associated with the secondary wireless server (100).

5. The method as claimed in claim 3 comprising: preventing the at least one mobile wireless client (1004) from being configured with at least some secondary configuration data associated with the secondary wireless server (1010).

6. The method as claimed in claim 3 comprising: identifying the primary configuration data as taking priority over at least some secondary configuration data associated with the secondary wireless server (1010) and preventing the at least one mobile wireless client (1004) from being configured with the at least some secondary configuration data."

27. To facilitate the understanding of the subject patent and do an efficient analysis of the key elements within the application, this Court has found it appropriate to do Claim Construction using a tabular chart delineating the key elements of each of the Claims, while also providing relevant details and specific attributes associated with each element. The said tabular chart is set out below:

Claim	Key Elements	Details
Claim 1	Primary Wireless Server (1002)	➢ Operable with multiple mobile wireless clients (1004). ➢ Contains primary configuration data for mobile clients. ➢ Primary database stores user information and identifications. ➢ Primary program controls dissemination of information.
	Secondary Wireless Server (1010)	➢ Operable with at least one mobile wireless client. ➢ Secondary database stores user information and identifications. ➢ Secondary program controls dissemination of information.
	Mobile Wireless Clients (1004)	➢ Comprises an executable program to detect primary configuration data. ➢ Evaluates and resolves conflicts between primary and secondary data. ➢ Governs permissible modes of operation.
Claim 2	Policies Governing Use	➢ Configuration data specifies policies for the use of mobile wireless clients.
Claim 3	Operation of Primary Wireless Server	➢ Controls communication with multiple mobile wireless clients. ➢ Manages user information in the primary database.
	Operation of Secondary Wireless Server	➢ Controls communication with at least one mobile wireless client. ➢ Manages user information in the secondary database.
	Determining Configuration Data	➢ Evaluates if mobile clients can use secondary configuration data. ➢ Resolves conflicts in favour of primary configuration data.
	Governance of Operation Modes	➢ Configuration data governs permissible operation modes for mobile clients.

Claim	Key Elements	Details
Claim 4	Controlling Client Operations	➢ Uses primary and secondary configuration data to control mobile client operations.
Claim 5	Preventing Configuration	➢ Prevents mobile clients from using secondary configuration data when conflicts arise.
Claim 6	Prioritizing Configuration Data	➢ Primary configuration data takes precedence over secondary data. ➢ Prevents conflicting configurations.

C3. Assessment of the Refusal Order

28. In this backdrop of the understanding of the subject patent application, this Court shall now proceed to assess the order of refusal of the subject patent application issued by the ld. Controller. The operative portion of the impugned refusal order of the Controller is set out below:

> *"After attending the hearing on the stipulated date as mentioned above, Applicant's agent filed the written submission and relevant documents on date 06/09/2019 regarding above mentioned objections. Having considered all the facts and submissions made by the Applicant/Agent in the written note of arguments as well as in view of all the documents on record and also on the basis of analysis and findings, it is found that the objection as raised in the hearing notice related to Non-Patentability u/s 3(k) still persists valid. The instant application is directed about the systems and methods for are provided for administration a mobile wireless client with more than one wireless servers.* ***The wireless servers are nothing but set of instructions (see para 0049), the group of software that may be installed on machine (see para 0054).*** *Thus, the* ***amended claims are purely functional thereby not having any inventive hardware features and hence not allowable u/s 3(k) of the Patents Act, 1970.****"*

29. From the above impugned refusal order, it is noticed that the ld.

Controller has once again applied the standard of requirement of inventive hardware to assess patentability of the subject patent application. In several decisions, including ***Ferid Allani Vs Union of India & Ors., 2019 SCC OnLine Del***, and ***Raytheon Company v. Controller General of Patents and Designs, 2023:DHC:6673***, this Court has clarified that Computer Related Inventions (CRIs) cannot be tested on the fulcrum of requirement of inventive hardware, as the same is a higher standard which lacks any basis in law. The relevant extracts of the decision in ***Raytheon Company (supra)*** are set out below:

> *"20. Insofar as the novel hardware requirement is concerned, it is now well-settled that the said requirement is not to be insisted upon in applications relating to inventions of computer programs. The manner in which such applications are to be examined and the interpretation of Section 3(k) is now settled by this Court in Ferid Allani (supra) and Microsoft (supra) …*
>
> *21. As can be seen from the above extracts in case of computer related inventions,* ***the patent office needs to examine if there is a technical contribution or as to what is the technical effect generated by the invention as claimed.*** *In the present case, it needs to be examined as to whether the system sought to be patented reduces the time period in scheduling job execution in HPC system. The requirement of novel hardware is a higher standard which lacks any basis in law.*
> *22.* ***The novel hardware standard existed in the 2016 CRI Guidelines which have been replaced by the 2017 CRI Guidelines.*** *The patent office was in error by following the inapplicable 2016 Guidelines. Accordingly, the impugned order is not sustainable and the appeal is allowed. The impugned order is set aside. The subject patent application of the Appellant shall*

> *now be examined afresh without insisting upon the novel hardware requirement. Considering the time that has already lapsed since the filing of the present patent application, it is directed that the application shall now be examined within three months from the date of receipt of this order and appropriate orders shall be passed by the Patent Office."*

30. As can be seen the above extract, the novel or inventive hardware requirement existed in the 2016 CRI Guidelines issued by the Office of the Controller General of Patents, which were subsequently replaced by the 2017 CRI Guidelines, which have no such requirement. Accordingly, to analyse the objection of non-patentability under Section 3(k) of the Act, this Court shall proceed to evaluate the patentability of the subject patent application on the basis of the following remaining issues:

Issue 1: Whether the technical contribution of the subject patent is merely a set or sequence of instructions?

Issue 2: Whether the substance of the subject patent is directed towards algorithmic processes?

C4. Is the technical contribution of the subject patent is merely a sequence of instructions?

31. To assess whether the technical contribution of the subject patent is restricted to a mere set or sequence of instructions, it is essential to analyse the Claims of the subject patent in conjunction with the Complete Specification. For the said purpose, this Court shall use the Claim Construction that has been carried out in Section C2 of the present Judgment. Specifically, the examination of this issue shall focus on the question whether the claimed invention goes beyond a series of instructions or if it primarily

constituting a set of if-then-else iterations that do not meet the criteria for patent protection under Section 3(k) of the Act.

32. The complete specification provides the context and detailed description of the subject patent application, outlining the technical contribution of the subject patent in the system architecture, data management strategies, conflict resolution mechanisms, and operational synchronization. In the opinion of this Court, the subject patent clearly provides a broad framework, implementation details for resolution of a technical problem, the Claims read with the Complete Specification clearly highlight that the core functionality of the subject patent are driven by conditional logic and procedural steps. For instance, the programs on the mobile devices evaluate policies and resolve conflicts through predefined conditions and actions, which are classic characteristics of if-then-else logical iterations.

33. The detailed description of the invention does describe the various embodiments in the form of an architecture of systems. However, at various paragraphs in the Complete Specification, for example paragraphs [0050] and [0051], use of language such as "*configured as a set of interoperative instructions*", and "*configured to control dissemination of information from the least one secondary database to the at least one of the plurality of mobile wireless clients on a shared basis responsive to a determination of a privacy state of information.*" highlights the instructional nature of the implementation of the technical contribution of the subject patent. The said description clearly indicates that the subject patent's core functionality, though technical in nature relies heavily on a series of logical instructions to manage data dissemination and privacy settings. The said paragraphs [0050] and [0051] are extracted as under:

> *"[0050] In various embodiments, wireless server 205* ***may be configured as a set of inter-operative instructions*** *that when processed using a controller, such as a processor, cause performance of functions correlated to interaction within one or more of the wireless clients 210 and/or one or more of the web-based clients 215. Wireless server 205 may have one or more functional sections such as a controller 222, a router 224, a dispatcher 226, a database 228, a mobile data system (MDS) 230, an attachment service 232, a policy service 234, a synchronization service 236, a messaging agent 238, and an e-mail proxy service 240. E-mail proxy service 240 provides a mechanism for wireless server 205 to access a group 241 of mail accounts external to wireless server 205. Group 241 includes two or more mail accounts such as an internet message access protocol (IMAP) mail account 243, a post office protocol (POP) system account 245, a google mail account 247, or other mail accounts 249.*
>
> *[0051] In an embodiment, wireless server 205 includes a share agent 207* ***configured to control*** *dissemination of information from wireless server 205 to mobile wireless clients 210 or other entities on a shared basis* ***responsive to a determination of a privacy state of the information.*** *Share agent 207 may control one or more of database 228, mobile data system 230, attachment service 232, policy service 234, synchronization service 236, messaging agent 238, and e-mail proxy service 240. Share agent 207 may be distributed among mobile data system 230, attachment service 232, policy service 234, synchronization service 236, messaging agent 238, and e-mail proxy service 240 or structured within one of these wireless server instrumentalities."*

34. In addition, paragraph [0061] describes a flow control agent, known as a server policy agent (SPA) that operates based on a communication policy to manage and limit the flow of information among mobile wireless clients. This

SPA is configured to apply a set of rules designed to regulate the use of voice communication services on multiple mobile wireless clients. The communication policies include operational instructions to control the use of networks external to the system, such as the Internet. Thus, the SPA ensures that information flow is regulated according to the predefined communication policies to maintain control and efficiency in the use of communication services across the mobile wireless clients. The said paragraph [0061] of the Complete Specification is set out below:

> *"[0061] Policy service 234 may be configured as a flow control agent responsive to a communication policy to limit the flow of information with each of mobile wireless clients 210. Such an agent may be referred to as a server policy agent, SPA.* ***The communication policy includes a set of rules*** *to regulate use of voice communication services on the plurality of mobile wireless clients. The communication policies may also include operational instructions to regulate use of a network external to the system. For example, the communication policy may regulate the flow of information from each of mobile wireless clients 210 to entities on the Internet. Such communication policies may be arranged as a set of policies, where a policy in the set may be applied to one or more of the mobile wireless clients 210. The policies may regulate flow of e-mail messages, instant messaging communications, page messages, text communications, and/or telephonic calls."*

35. From the above extracts of the specification and the understanding arrived at, it is clear that the above service and agent are configured in such a manner which is characteristic of a set of logical instructions which are characteristics of an algorithm, employing if-then-else logic statements. This configuration ensures that the SPA operates dynamically and adaptively in

response to varying communication policies, thereby optimizing the control and regulation of information flow among the mobile wireless clients. The use of such algorithmic logic allows the SPA to effectively manage complex communication scenarios and enforce policies with precision and reliability.

36. In order to complete the assessment of various parts of the Complete Specification, this Court shall also consider the elaboration of the Independent Claim relating to the method in Claim 3, given in paragraphs [0133] to [0135]. Paragraph [0133] describes a method where the wireless server displays scenarios, the user selects one, and the server determines parameters based on this selection. Further, paragraph [0134] elaborates on the sequence of steps where the server presents options, receives user input, and then autonomously identifies and implements configuration parameters. Finally, in paragraph [0135], various scenarios that trigger changes in configuration data are highlighted. Accordingly, in the opinion of this Court, these processes are essentially a sequence of user interactions and automated server responses, which can be implemented as a set of instructions. Clearly these outline a sequence of instructions executed based on conditional logic and consequently subject matter which does not qualify for patent protection.

37. From the above assessment of the Complete Specification as a whole, it is clear that the subject patent application is primarily a set of instructions which direct the manner in which the data has to flow between servers and to the devices/clients. The use of terminology, such as, protocols, standard protocols, proprietary protocols (in paragraph [0063]), further support this conclusion. Instructions for operating as a wireless server include instructions to collect emails from one or more email domains. Repeatedly, in various paragraphs would show that these are a complex maze of instructions which

are embodied in the servers which determine how the servers would route the information.

38. Further, this Court would also highlight that the system described in Independent Claim 1 also fundamentally involves a series of conditional steps executed by the primary and secondary programs. These steps include detecting configuration data, evaluating policies, and resolving conflicts. The operation of these programs can be reduced to a series of if-else logic statements or conditional logic. For instance:

- If primary configuration data is detected, then evaluate policies.
- If a conflict is identified, then resolve it in favour of the primary configuration data.
- Control dissemination of information based on these evaluations.

39. From the above steps, it is clear that the operations to be performed as part of the technical solution envisaged in the subject patent are essentially comprising a sequence of instructions, guiding the system on how to process data and manage conflicts. Similarly, Independent Claim 3 outlines procedural steps for administering wireless systems. These steps involve controlling server operations, managing databases, and determining the applicability of configuration data. The main steps involved in the operation of the method given in Claim 3 are as follows:

- Control communication based on server and client interactions.
- Manage user data within the databases.
- Determine configuration applicability by evaluating policies.
- Resolve conflicts in favour of primary configuration data.

40. Similar to the first Independent Claim, the above operations can be

actually a series of instructions that guide the functionality of the system, primarily through conditional if-then-else logic steps. Therefore, upon the analysis of the Independent Claims 1 and 3, it is evident that the technical contribution of the subject patent primarily consists of a sequence of instructions. These instructions guide the system and method operations, involving steps like detecting configuration data, evaluating policies, and resolving conflicts through conditional logic. The Claims indeed describe a structured approach to managing various operations within wireless systems, yet this approach is fundamentally based on algorithmic processes, which do not qualify for patent protection under Section 3(k) of the Act.

41. Given the findings from the above analysis of the Claims and the Complete Specification, it is evident that the core functionality of the subject patent is driven by conditional logic and procedural steps. Accordingly, in terms of the judgment of the Coordinate Bench of this Court in ***Lava International v. TLM Ericsson, 2023:DHC:2698***, given that the technical contribution of the subject matter for which patent protection is sought is solely covering a complex sequence of instructions, the objection under Section 3(k) of the Act raised by the Controller is justified.

C5. Whether the substance of the subject patent is directed towards algorithmic processes?

42. In the above section, this Court has already concluded that the subject patent is primarily claimed protection over sequence of instructions, thereby not being eligible for patent protection. However, for the sake of completeness, the Court shall also determine if the characteristic steps and sequence of instructions are an algorithmic process.

43. In paragraph [0043] of the Complete Specification, an algorithm has been defined to be a self-consistent sequence of steps leading to a desired result. A perusal of Section 3 (k) of the Act would show that the words "*per se*" do not qualify algorithms like they qualify computer programmes. The said Section is set out below:-

> *"3.**What are not inventions**.- The following are not inventions within the meaning of this Act,-*
>
> *xxx xxx xxx*
>
> *(k) a mathematical or business method or a computer programe per se or algorithms;"*

44. While the term "*per se"* qualifies computer programme, algorithms are not entitled to patents under the extant law. To this extent, insofar as algorithms or sequences of instructions are concerned, the law in India is different from the law in other jurisdictions, such as, US and EU. A tabular comparison of the relevant provisions of India, UK and EU are set out below:

India	**UK**	**EPO**
Section 3(k) of the Patents Act, 1970	Section 1(2) of the Patents Act 1977 (UK)	Article 52(2) and 52(3) of the European Patent Convention (EPC)
Section 3: What are not inventions The following are not inventions within the meaning of this Act,— xxx (k) a mathematical or business method	(2) It is hereby declared that the following (among other things) are not inventions for the purposes of this Act, that is to say, anything which consists of - (a) a discovery, scientific theory or mathematical method; xxx (c) a scheme, rule or method for performing a mental act, playing a game or doing business, or a program for a computer;	The following in particular shall not be regarded as inventions within the meaning of paragraph 1: (a) discoveries, scientific theories and mathematical methods; xxx (c)schemes, rules and methods for performing mental acts, playing games or doing business, and programs for

or a computer programme per se or algorithms	(d) the presentation of information; but the foregoing provision shall prevent anything from being treated as an invention for the purposes of this Act only to the extent that a patent or application for a patent relates to that thing **as such**.	computers; xxx (3)Paragraph 2 shall exclude the patentability of the subject-matter or activities referred to therein only to the extent to which a European patent application or European patent relates to such subject-matter or activities as such.

45. In the EU, for example, under Article 52, algorithms are also qualified by the words 'as such'. While the effect of "*per se"* or "*as such*" on computer programmes would make the law uniform between India and EU *qua* such programs, insofar as algorithms are concerned, the position would not be the same. This Court has considered the position in respect of business methods in India in reference to Section 3(k) of the Act in ***OpenTV Inc.* v. *The Controller of Patents and Designs, 2023:DHC:3305*** and held that the bar in India over business methods is absolute and not qualified. The similar position would also be applicable for algorithms, as no qualifier exists in respect of algorithms also. The relevant extract of the judgment in OpenTV Inc. (supra) is set out below:

> *"72. The qualifier* ***`as such'*** *thus applies in both U.K. and Europe to all categories of excluded inventions including business methods. Thus the bar is not absolute and if there is something more than the business method itself, patenting could be permissible. However, in India, the phrase 'per se' does not qualify business methods. Thus, the patentability of inventions based on methods of doing business or financial transactions, raised on the basis of decisions from the U.K. and European Patent Office which analyse the technical effect of a business method invention would not be*

squarely applicable in India. The bar in India to grant of business method patents has to be read as an absolute bar without analysing issues relating to technical effect, implementation, technical advancement or technical contribution.

73. Thus, the only question that the Court or the Patent Office while dealing with patent applications involving a business method, needs to consider is whether the patent application addresses a business or administrative problem and provides a solution for the same."

46. In the recent final judgement in ***Lava International Ltd. (supra)***, the intricacies of determining patentability of inventions relating to algorithms have been considered. In the said decision the Court has assessed the CRI Guidelines issued by the office of the Controller General of Patents in 2017 along with relevant judicial precedents to hold that inventions solely directed towards algorithms are not patentable as per the current position of law in Section 3(k) of the Act. However, the Court has clarified that inventions which merely integrate such elements within a system or method that enhances the functionality of a system or hardware component, and meet all the criteria for patentability, can indeed be considered patentable. This understanding emphasises the necessity of demonstrating a further technical effect through the incorporation of algorithms within a system to qualify for patent protection. This approach aligns with the legislative intent to adapt patent laws to the evolving technological landscape, particularly in the context of software combined with hardware, reflecting the demands of modern industry as underscored in legislative discussions and statements. The relevant extract from the said judgment is set out below:

"69. After analysing the CRI Guidelines and the

aforementioned judgments, I am of the view that the inventions that are solely directed towards algorithms, mathematical methods, business methods or are computer programmes per se, would not satisfy the test of patentability and would consequently, not be inventions. However, an invention that merely incorporates algorithms, sets of instructions, mathematical or business methods within a method or system, and satisfies all the criteria for patentability, is not inherently non-patentable. Therefore, what has to be seen is that if the algorithms are directed at enhancing the functionality of a system or a hardware component, the effect or the functionality derived by the system or the hardware component is a patentable subject matter ***However, the algorithm itself is not a patentable subject matter.*** *To illustrate, we may consider the example of a smart thermostat algorithm that dynamically adjusts the heating or cooling of a room in a building based on real-time weather data, occupancy patterns and energy prices. This algorithm, by itself, is a series of computational steps and may not be patentable. However,* ***the implementation of this algorithm within a device, even if the said device is a general-purpose computer, in such a way that it transforms the computer's capabilities and leads to tangible benefits*** *like reduced energy consumption, cost savings and improved comfort levels for occupants can be considered as a patentable subject matter."*

47. The above extract has also been considered by this Court in ***Microsoft Technology Licensing, LLC v. Assistant Controller Of Patents And Designs, 2024:DHC:3547***, wherein the refusal of an application for grant of patent was overturned as the said invention transformed the capabilities of a general purpose computer, to make it suitable for effective data compression, which it otherwise was not capable of. The relevant extracts of the said decision are

set out below:

> *"Technical Effect of the Subject Patent Application*
> *33. In light of the above discussion, it is clearly established that in case of an invention involving computer programmes, to circumvent the limitations imposed by Section (k) of the Act, a patentee must demonstrate that the overall method and system disclosed in the patent application, upon implementation in a general-purpose computer, must contribute directly to a specific and credible technical effect or enhancement beyond mere general computing processes. Therefore, the inventive contribution of a patent should not only improve the functionality of the system but also achieve an innovative technical advantage that is clearly defined and distinct from ordinary operations expected of such systems.*
> *34. From the claim construction analysis carried out, it is clear that the subject patent application discloses a method and system that not only provides a real world application for complex mathematical transformations, including lapped transforms and reversible overlap operators, but also integrates these operations into a hardware setup (processor [4710] and data storage buffer [4740]) that performs digital media data compression. This integration significantly enhances the functionality of the hardware components of the subject patent application by enabling efficient and reversible compression, which directly contributes to improved system performance and efficiency. Therefore, clearly the subject patent application enhances the functionality of the general-purpose computers that would implement the subject patent application.*
> *35. Additionally, the Claims of the subject patent application specify the application of a series of data manipulation techniques such as reversible 2-dimensional overlap operators and block transforms. These techniques are implemented in a way that optimises the compression process for digital media*

> *data. Clearly, in the understanding of the Court, this optimization is not merely a theoretical improvement but is applied in practical hardware configurations, contributing a clear technical effect of enhanced data compression capabilities and reduced storage requirements during processing.* ***Accordingly, the integration of the described methods and techniques into a digital media processor, as detailed in Claims involving specific hardware components of data storage buffers and processors, transforms the capabilities of general-purpose computing hardware into a specialised apparatus capable of efficient and effective data compression, which it otherwise was not expected to be capable of. This transformation also meets the criteria of further technical effect as stated to be a requirement in Lava (supra),*** *wherein an invention that incorporates computer programmes or algorithms in such a way that it significantly enhances the hardware's functionality is considered patentable, as long as it meets the criteria for patentability."*

48. Accordingly, it is evident that insofar as algorithms are concerned, if the invention relates purely to a set of instruction or policies which determine the flow without any substantial change in the hardware, such instructions even if they have a bearing on the manner in which the flow of data occurs would not be entitled to patent protection in India.

49. In the present appeal, the terms policy agent, communication policy, interoperating instructions, clearly suggest that the invention relates to an algorithm which regulates the flow of information. This is also clear from the reading of paragraph [0083] of the complete specification, where the following language is used:-

> *"[0083] In an embodiment, instructions to operate the mobile wireless device as a multiple-mode wireless*

client may include instructions to control the flow of information. The instructions for regulating information flow may include, but are not limited to, instructions to manage reception and transmission of e-mails through at least one wireless server in a share group with the mobile wireless device, to share calendar content associated with the user identification, to apply a browser in the mobile wireless device to browse files on a wireless server in a share group with the mobile wireless device, to sync the flow of informational content into the mobile wireless from a wireless server in a share group with the mobile wireless device, to sync the flow of informational content from the mobile wireless to a wireless server in a share group with the mobile wireless device. The informational content may include, but is not limited to, calendar data, photograph data, music data, video data, text data, or combinations thereof."

50. Upon perusing the above paragraph, it is evident that the subject patent also encompasses a set of algorithmic instructions aimed at managing and regulating the flow of various types of informational content. These instructions are designed to facilitate the operation of the mobile wireless device as a multiple-mode wireless client. In particular, these instructions also enable the management of reception and transmission of e-mails through a wireless server, enabling the device to participate in a shared group. This also includes the sharing of calendar content associated with the user's identification, applying a browser for file browsing on a wireless server, and synchronizing the flow of informational content between the mobile wireless device and the wireless server.

51. A perusal of Claim 1 of the final claims shows that the initial paragraphs mention various systems and hardware. However, the key part of

the Claim 1 is the configuration and the evaluation of the policies associated with the said configuration date to identify logically unresolvable conflicts. Primarily, such conflicts exist in the policies which the inventions seek to resolve in favour of primary configuration data. Such resolution of conflicts in respect of the flow of data through a set of instructions would be nothing but algorithms. The only technical effect of such instructions would be that the data would be regulated in a manner so as to determine the transmission either in favour of secondary servers or primary servers. Such an algorithm, in the opinion of this Court, is a pure algorithm which is not patentable under Indian Law, i.e. The Patents Act, 1970.

52. Insofar as the patentability of inventions incorporating algorithms is concerned, if the invention relates purely to a set of instruction or policies which determine the flow without any substantial change in the hardware, such instructions even if they have a bearing on the manner in which the flow of data occurs would not be entitled to patent protection in India. But if the algorithm instructions are thereafter implemented through computer software coded for this purpose and result in a technical effect or technical contribution then the test applicable to computer software can also be applied and patentability can be adjudged. In such a case the inventive feature would have to be the implementation and not the algorithm itself.

53. This fact has also been captured by the patent office, where the Patent Controller observed as under:-

> *"... The instant application is directed about the systems and methods for are provided for administration a mobile wireless client with more than one wireless servers. The wireless servers are nothing but set of*

instructions (see para 0049), the group of software that may be installed on machine (see para 0054)….”

54. While the latter part of the impugned order which requires inventive hardware features would not be in accordance with law, the present invention does not cross the threshold of 3(k) as it relates purely to algorithm.

55. Insofar as the reliance of the Appellant on the decision of the Board of Appeal if the European Patent Office in ***Vicom Inc. (supra)*** is concerned, in view of the differing position of law in India and the EPO, as highlighted by the Court above. Further, in the said decision, the Board of Appeal, has considered the qualifier of ‘*as such*’ to mathematical methods, which is not applicable in India.

56. Even on merits, the said decision is directed towards the assessment of patentability of mathematical methods when they are integrated to a technical process involving physical entities, producing a direct technical result. However, the present case deals with components such as flow control agent and communication policies for managing data flow, which do not directly align with the criteria established in ***Vicom Inc (supra)***. Additionally, the flow control agent and communication policies for regulating information flow among mobile wireless clients pertains to managing communication protocols and data flow rather than processing or filtering data in a mathematical context. Thus, the primary nature of the invention differs significantly, focusing more on network management, which in any event cannot be granted patent protection.

57. Accordingly, on account of the key differences in the nature of the invention, the distinction between technical processes and mathematical methods, and the technical means described in the Claims lead to the

conclusion that the ***Vicom Inc. (supra)*** judgment is not be applicable to the present case.

D. Conclusion and Directions

58. Accordingly, in light of the analysis and findings presented in this judgement, it is evident that while the subject patent application has a technical contribution, the said contribution primarily arises out of the use of an algorithmic process that regulates the flow of information through a sequence of instructions. The Claims, when read in conjunction with the Complete Specification, clearly indicate that the core functionality of the invention relies heavily on conditional logic and procedural steps. As established, such algorithmic processes fall under the exclusion criteria outlined in Section 3(k) of the Indian Patents Act, which disqualifies mathematical methods, business methods, and computer programs per se from being patentable subject matter.

59. As highlighted before, the specific usage of the terms "policy agent," "communication policy," and "interoperating instructions" within the complete specification further underscore that the technical contribution of the subject patent is essentially an implementation of algorithmic logic. This was clearly illustrated in paragraphs [0050], [0051], and [0061] of the Complete Specification, which describe the system's operation in terms of predefined conditions and actions—a hallmark of if-then-else logical iterations. Consequently, the objection raised by the Controller under Section 3(k) of the Act is both appropriate and justified.

60. Further, as specified in the analysis of Independent Claims 1 and 3, the operations such as detecting configuration data, evaluating policies, and

resolving conflicts, are guided by a series of instructions whose technical contribution primarily revolves around the use of an algorithm and nothing more. Further, these operations given in the Complete Specification are fundamental to the system and method described in the Claims and do not extend beyond the realm of algorithmic logic to warrant patent protection, under the provisions of the Act.

61. Given the above considerations, the appeal lacks merit is, therefore, dismissed.

62. The Registry is directed to supply a copy of this judgment to the office of the Controller General of Patents, Designs and Trademarks of India on email llc-ipo@gov.in so that the same can be added to the file wrapper of the subject patent application.

63. All pending applications are disposed of.

PRATHIBA M. SINGH
JUDGE

AUGUST 30, 2024
mr/am